

What is claimed:

*Sub A!* 1. A pneumatic radial ply runflat tire (10) having a tread (12), a carcass (25) with two sidewalls (18,19) and two inextensible annular beads (26) and a radial ply structure (37) of one or more radial plies (30,40) and one or more inserts (46,48), and a belt structure (16) located between the tread and the radial ply structure, the runflat tire characterized by:

a fabric underlay (60) deployed between the belt structure (16) and the radial ply structure (37) for supporting tensile loads during both normal-inflated and runflat operating conditions, the fabric underlay containing high-modulus reinforcing cords (62) being aligned about 0 degrees to 20 degrees with respect to the equatorial plane of the tire.

2. The tire (10) of claim 1 in which the fabric underlay (60) is disposed radially inward of the belt structure (16) and having opposing marginal edges (27,28) which extend laterally beyond lateral edges of the belt structure.

3. The tire (10) of claim 1 in which the high-modulus reinforcing cords (62) of the fabric underlay (60) are made of high-modulus material selected from the group consisting essentially of polyester, nylon, rayon, aramid and glass.

4. The tire (10) of claim 1 in which the fabric underlay (60) is located on the tensile side of the neutral bending axis of the combined belt structure (16), fabric underlay (60) and ply structure (37).

5 5. The tire (10) of claim 4 in which the circumferentially oriented cords (62) of the fabric underlay (60) are prestressed in tension during manufacturing of the tire.

10 6. The tire (10) of claim 1 in which the fabric underlay (60) separates the belt structure (16) from the ply structure (37).

15 7. The tire (10) of claim 1 in which the reinforcing cords (62) of the fabric underlay (60) are most preferably oriented at an angle of 0 degrees with respect to the equatorial plane of the tire.

8. The tire (10) of claim 1 in which a fabric overlay (540) is disposed between the belt structure (16) and the tread (12).

20 9. The tire (10) of claim 1 wherein at least one or more of radial plies (30,40) is reinforced by essentially inextensible cords.

10. A method of constructing a radial ply runflat tire (10) by the steps of:

a) forming a blown-up green tire carcass (25);

b) circumferentially wrapping a ribbon of cord-reinforced elastomeric material upon the blown-up green tire carcass to form the fabric underlay (60) so that the cords of the elastomeric material are oriented at an angle of about 0 degrees to about 5 degrees with respect to the equatorial plane of the blown-up green carcass;

c) blowing up the green tire carcass with the wrapped fabric overlay to engage a belt structure (16) and a tread (12) to form a completed green tire; and

10 d) blowing up the completed green tire in a curing mold to prestress the reinforcing cords (62) of the fabric underlay (60).

11. The method of claim 10 further including the step of circumferentially winding the ribbon of cord-reinforced elastomeric material about the blown-up green carcass such that the edges of the ribbon overlap.

12. The method of claim 10 further including the step of circumferentially winding the edges of the ribbon of cord-reinforced elastomeric material about the blown-up carcass such that the edges of the ribbon meet without overlapping.

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